

**County:** Cumbria

**Site Name:** Ellery Sike

**District:** Carlisle

**Status:** Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

**Local Planning Authority:** Carlisle City Council

**National Grid Reference:** NY 546757      **Area:** 3.62 (ha) – (ac)

**Ordnance Survey Sheet 1:50,000:** 86      **1:10,000:** NY 57 NW

**Date Notified (Under 1981 Act):** 1998      **Date of Last Revision:** –

**Other Information:**

This is a new site.

A Geological Conservation Review (GCR) site.

**Description and Reasons for Notification:**

The site consists of Ellery Sike and White Lyne, together comprising approximately 1 km of streams providing exposures of the rock succession in the banks and beds. Ellery Sike lies about 15 km north of Brampton.

The site shows important sections in the earliest part of the outcropping Lower Carboniferous sequence of the Bewcastle area. The lower part of the Chadian Stage, Lynebank Formation of the Lower Border Group is exposed and includes the Ellery Sike Limestones at its type locality. A wide variety of sedimentological and palaeontological features are present. This includes a succession of Yoredale-type ‘marine’ limestone-deltaic clastic cycles. The limestone contain a variety of peritidal stromatolite growths associated with sessile, cemented vermatid gastropod. These combined with the rarity of organisms indicating normal salinity, suggest that the limestones were deposited under conditions of elevated salinity, reflecting the presence of a fault activated sill or barrier at the outer margin of the basin.

The site is of outstanding importance to the understanding of early Carboniferous palaeogeography in the central area of the Northumberland Trough.